

CLAIMS

1. (Previously Presented) An ex-vessel core melt retention device preventing molten core concrete interaction, which is installed for alleviating risks due to unexpected accidents over accidents considered as a design criteria of a nuclear plant, the device comprising:

horizontal jacket pipes located on a shell boundary of a cavity floor of a reactor cavity, the horizontal jacket pipes having water inlets A formed at their lower half, the water inlets including a series of holes and allowing water to enter the bottom of the pipes;

vertical pipes connected at both ends of the horizontal jacket pipes in the form of a conventional dovetail joint to communicate with each other, the vertical pipes including open ends disposed within said reactor cavity to permit water vapor to escape therethrough and enable recirculation of said vapor within said reactor cavity; and

a water supply part located at the lower half of the horizontal jacket pipes for allowing water to enter from the holes at the lower half of the horizontal jacket pipes.

2. (Withdrawn) The device as claimed in claim 1, wherein the water supply part includes shallow water channels being engraved into the cavity floor, in which the horizontal pipes are installed, and running crosswise to the horizontal pipes.

3. (Withdrawn) The device as claimed in claim 1, wherein the water supply part includes horizontal supply pipes which is arranged normal to and beneath the horizontal jacket pipes and has water inlets B formed in all directions and locations.